

INTERNATIONAL SEARCH REPORT

International Application No

'GB2004/002853

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 E21B47/18

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 E21B G05D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 2 160 565 A (EXXON PRODUCTION RESEARCH CO) 24 December 1985 (1985-12-24) the whole document	1-13, 17-26, 30-34
X	FR 2 721 347 A (MAGELLAN CY LTD;ENGINEERING INDUSTRY LTD) 22 December 1995 (1995-12-22) the whole document	1-13, 17-26, 30-34
X	US 4 774 694 A (MOLL HELMUT) 27 September 1988 (1988-09-27) the whole document	1
X	US 6 097 310 A (MORSY HATEM SALEM ET AL) 1 August 2000 (2000-08-01) the whole document	1
	----- -/-- -----	



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

20 September 2004

Date of mailing of the international search report

10.12.2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Philippot, B

INTERNATIONAL SEARCH REPORT

International Application No
GB2004/002853

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 105 690 A (BIGLIN JR DENIS P ET AL) 22 August 2000 (2000-08-22) the whole document -----	1
X	GB 2 368 861 A (SCHLUMBERGER HOLDINGS) 15 May 2002 (2002-05-15) the whole document -----	1
X	WO 02/072993 A (BAKER HUGHES INC) 19 September 2002 (2002-09-19) the whole document -----	1
A	EP 0 744 527 A (BAKER HUGHES INC) 27 November 1996 (1996-11-27) the whole document -----	1-25

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2004/002853

Box II Observations where certain claims were found unsearchable (Continuation of Item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of Item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-13, 17-26, 30-34

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-13,17-26,30-34

downhole data communication

2. claims: 14-16,27-29

a flow rate meter

INTERNATIONAL SEARCH REPORT

International Application No

GB2004/002853

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 2160565	A	24-12-1985	US H55 H AU 4380185 A NO 852332 A	06-05-1986 02-01-1986 19-12-1985
FR 2721347	A	22-12-1995	GB 2290320 A FR 2721347 A1	20-12-1995 22-12-1995
US 4774694	A	27-09-1988	CA 1189443 A1 US 4694439 A	25-06-1985 15-09-1987
US 6097310	A	01-08-2000	CA 2259819 A1 GB 2333787 A ,B	03-08-1999 04-08-1999
US 6105690	A	22-08-2000	NONE	
GB 2368861	A	15-05-2002	US 6536529 B1	25-03-2003
WO 02072993	A	19-09-2002	CA 2440815 A1 EP 1377725 A2 NO 20034083 A WO 02072993 A2 US 2002159333 A1	19-09-2002 07-01-2004 12-11-2003 19-09-2002 31-10-2002
EP 0744527	A	27-11-1996	EP 0744527 A1 DE 59509406 D1 NO 962076 A	27-11-1996 16-08-2001 25-11-1996